

**WHAT IS CLAIMED IS:**

1. A genetically manipulated, replicating, infectious paramyxovirus, comprising at least one alteration to the viral genome, selected from an insertion and a deletion.
2. The virus of Claim 1 wherein the viral genome is derived from respiratory syncytial virus.
3. The virus of Claim 1 wherein the viral genome is derived from parainfluenza virus.
4. A process for the preparation of an infectious replicating paramyxovirus comprising the steps of:
  1. providing a host cell expressing a heterologous RNA polymerase;
  2. introducing into said host cell:
    1. one or more DNA molecules encoding the virus N, P and L proteins operably linked to a polymerase binding site;
    2. a DNA molecule comprising the cDNA of the paramyxovirus wherein the cDNA encodes the entire genome of the virus or is modified by the incorporation of a mutation or heterologous sequence, and wherein the DNA molecule is transcribed by a heterologous RNA polymerase, and
  3. isolating the virus produced by the cell.
5. The process of Claim 4 wherein the virus is respiratory syncytial virus.
6. The process of Claim 4 wherein the virus is parainfluenza virus.